

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P233296

Luminaire Tested: **4VRVT3-LD5-6-W-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P233296
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1709-268-9)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4VRVT3-LD5-6-W-UNV-L840-CD1-U
Description: 4FT VRVT3 WIDE APPLICATION, 6000LM
Light Source: (392) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6655.0 lumens
Efficiency: N/A
Efficacy: 135.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.67 / 1.66
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.17')
CIE Type: Semi-Direct

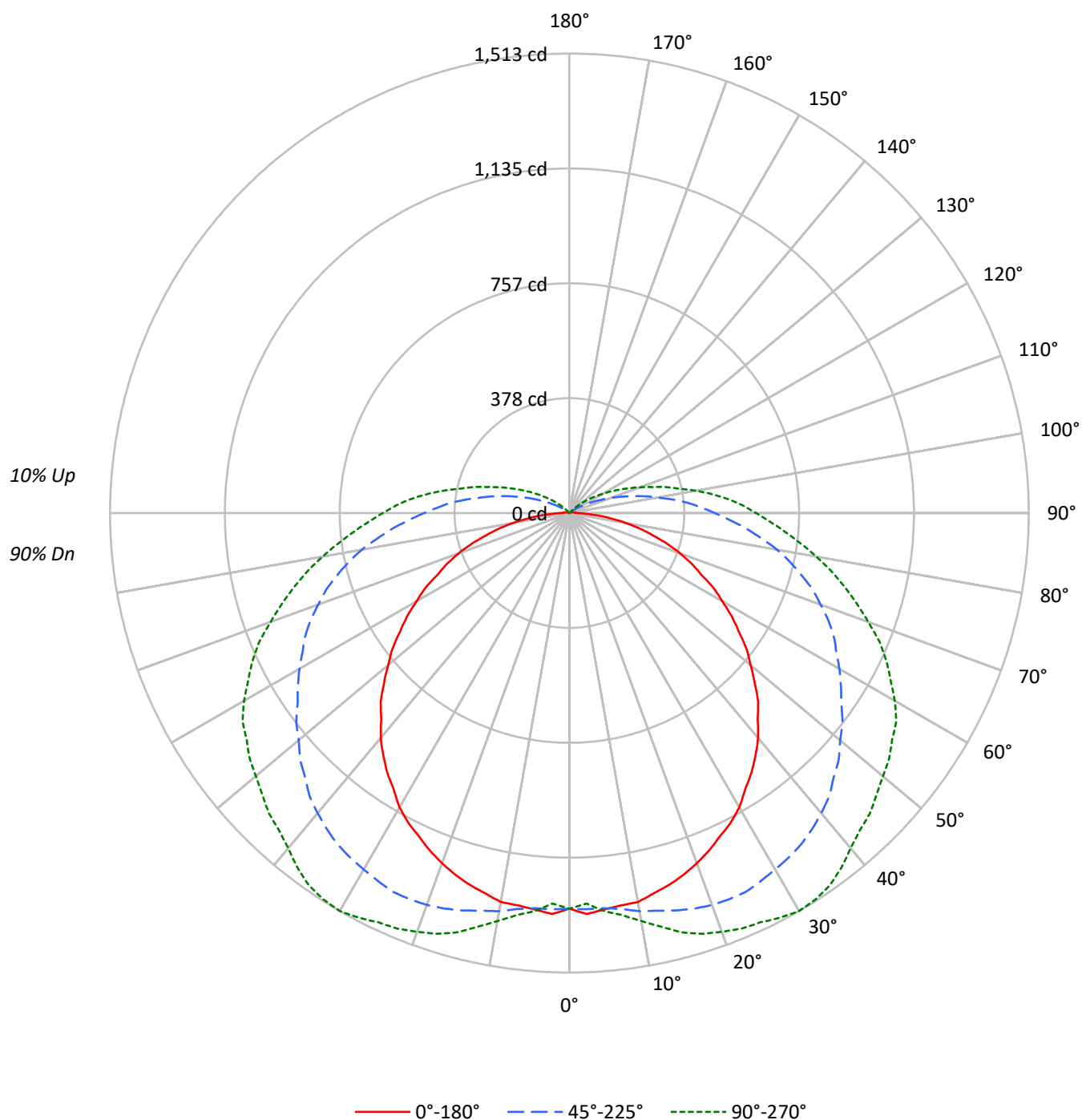
Input Watts (W): 49.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	117	117	117	117	113	113	113	113	105	105	105		99	99	99		93
1	103	96	91	86	99	93	88	83	87	83	79		81	78	74		76
2	92	82	74	67	88	79	72	65	74	67	62		69	64	59		64
3	83	71	61	54	79	68	60	53	64	56	50		59	53	48		55
4	75	62	52	44	72	60	51	44	56	48	42		52	46	40		49
5	69	55	45	38	66	53	44	37	50	42	35		46	40	34		43
6	63	49	39	32	61	47	38	32	44	36	31		42	35	29		39
7	58	44	35	28	56	43	34	28	40	32	27		38	31	26		36
8	54	40	31	25	52	39	30	24	37	29	24		34	28	23		33
9	51	36	28	22	49	35	27	22	33	26	21		32	25	20		30
10	47	33	25	20	45	33	25	19	31	24	19		29	23	18		28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8413	8413	8413
5°	8463	8240	8239
10°	8466	8274	8357
15°	8381	8356	8632
20°	8307	8474	8800
25°	8205	8560	8931
30°	8150	8562	9168
35°	8005	8612	9215
40°	7876	8617	9093
45°	7709	8566	9130
50°	7461	8523	9174
55°	7240	8509	9303
60°	7007	8608	9442
65°	6720	8794	9476
70°	6579	8943	9420
75°	6135	9130	9386
80°	5683	9316	9399
85°	4854	9468	9490



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.7	1.9
10°-20°	383.3	5.8
20°-30°	625.7	9.4
30°-40°	815.4	12.3
40°-50°	915.3	13.8
50°-60°	935.8	14.1
60°-70°	878.8	13.2
70°-80°	742.8	11.2
80°-90°	550.1	8.3
90°-100°	360.0	5.4
100°-110°	198.5	3.0
110°-120°	89.9	1.4
120°-130°	30.0	0.5
130°-140°	3.6	0.1
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1134.7	17.1
0°-40°	1950.1	29.3
0°-60°	3801.3	57.1
0°-90°	5973.0	89.8
90°-120°	648.4	9.7
90°-150°	682.0	10.2
90°-180°	682.0	10.2
0°-180°	6655.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1303	1303	1303	1303	1303	
5°	1310	1309	1306	1316	1315	125
15°	1268	1297	1354	1414	1429	358
25°	1174	1248	1376	1466	1487	542
35°	1045	1148	1331	1470	1496	653
45°	879	1010	1231	1361	1399	675
55°	681	842	1093	1252	1298	611
65°	479	661	961	1117	1152	479
75°	284	498	792	914	938	303
85°	97	335	584	693	714	97
90°	25	250	478	588	615	17
95°	19	179	390	490	525	14
105°	10	56	214	303	330	11
115°	4	5	90	164	181	5
125°	2	2	19	67	82	2
135°	1	0	0	4	13	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1302.7	1302.7	1302.7	1302.7	1302.7	1302.7	1302.7	1302.7	1302.7	1302.7	1302.7
2.5°	1321.4	1305.7	1306.4	1304.2	1304.2	1313.2	1310.9	1304.9	1306.4	1303.4	1305.7
5°	1310.2	1302.7	1303.4	1307.9	1307.2	1308.7	1310.2	1306.4	1313.2	1310.9	1305.7
7.5°	1302.7	1296.7	1298.2	1292.2	1304.2	1307.2	1307.2	1304.9	1311.7	1313.9	1314.7
10°	1300.4	1289.2	1293.7	1284.7	1296.7	1310.2	1307.9	1316.2	1321.4	1326.7	1331.2
12.5°	1282.5	1278.0	1275.7	1282.5	1298.9	1309.4	1302.7	1308.7	1322.9	1332.7	1340.9
15°	1267.5	1266.0	1265.2	1272.0	1279.5	1297.4	1299.7	1315.4	1334.9	1340.2	1354.4
17.5°	1248.7	1244.2	1247.2	1252.5	1276.5	1287.7	1298.2	1309.4	1336.4	1346.9	1365.7
20°	1227.0	1224.0	1233.7	1240.5	1263.0	1276.5	1289.2	1307.2	1327.4	1352.9	1373.1
22.5°	1202.3	1200.8	1209.0	1222.5	1251.7	1264.5	1273.5	1298.2	1329.7	1350.7	1376.1
25°	1173.8	1173.8	1182.8	1204.5	1239.0	1248.0	1262.2	1284.0	1313.2	1340.2	1376.1
27.5°	1149.8	1149.8	1158.0	1179.8	1208.3	1232.2	1250.2	1266.0	1304.2	1334.2	1365.7
30°	1119.1	1122.8	1129.5	1149.8	1185.0	1206.0	1222.5	1253.2	1290.0	1322.9	1355.2
32.5°	1077.8	1079.3	1096.6	1121.3	1157.3	1178.3	1200.8	1231.5	1279.5	1299.7	1344.7
35°	1044.9	1044.9	1060.6	1086.1	1132.5	1148.3	1170.0	1206.0	1248.7	1285.5	1331.2
37.5°	1006.6	1007.4	1028.4	1062.8	1099.6	1119.8	1140.8	1180.5	1223.2	1261.5	1312.4
40°	966.9	972.9	983.4	1017.9	1061.3	1086.1	1104.1	1149.0	1203.8	1241.2	1290.0
42.5°	917.4	924.2	942.9	978.1	1020.1	1054.6	1076.3	1116.1	1167.0	1217.2	1266.0
45°	879.2	883.0	900.9	936.2	983.4	1010.4	1032.1	1082.3	1135.5	1185.0	1230.7
47.5°	828.2	836.5	854.5	894.2	944.4	974.4	993.1	1042.6	1099.6	1146.8	1203.0
50°	779.5	786.3	811.7	847.7	903.2	928.7	954.2	1003.6	1068.1	1118.3	1164.0
52.5°	735.3	740.5	763.0	805.8	854.5	888.2	908.4	966.2	1029.9	1080.1	1134.0
55°	681.3	694.1	716.6	759.3	814.7	841.7	861.2	921.9	986.4	1044.9	1092.8
57.5°	634.1	646.8	670.1	715.1	769.0	794.5	825.2	885.2	944.4	1005.9	1060.6
60°	581.6	595.1	621.4	670.8	724.8	751.0	777.3	842.5	906.2	963.9	1026.9
62.5°	535.9	545.7	577.1	618.4	673.8	704.6	733.8	798.3	874.0	933.2	990.9
65°	479.0	499.2	527.7	576.4	631.1	661.1	693.3	759.3	826.7	892.7	960.9
67.5°	435.5	447.5	481.2	526.9	585.4	621.4	650.6	724.8	793.0	858.2	922.7
70°	388.3	399.5	432.5	481.2	542.7	574.1	613.9	684.3	760.0	821.5	880.0
72.5°	338.8	352.3	383.8	434.0	501.4	538.2	571.9	647.6	725.6	781.8	840.2
75°	284.1	304.3	341.0	389.8	458.7	497.7	531.4	611.6	681.3	739.0	792.3
77.5°	238.4	254.1	295.3	355.3	425.0	460.2	496.2	572.6	641.6	694.8	744.3
80°	188.9	210.6	247.3	310.3	380.8	417.5	455.0	526.9	592.9	646.1	694.1
82.5°	140.2	159.7	205.4	270.6	342.5	377.8	409.2	479.7	543.4	596.6	637.9
85°	96.7	114.7	165.6	231.6	299.8	335.0	366.5	437.7	495.4	539.7	583.9
87.5°	54.0	78.0	130.4	192.6	260.1	293.8	322.3	389.0	443.0	490.2	528.4
90°	24.7	49.5	95.9	155.9	218.1	250.3	280.3	340.3	395.8	437.0	478.2
92.5°	21.0	30.0	71.2	125.2	185.1	214.4	244.3	300.6	349.3	395.8	432.5
95°	18.7	20.2	46.5	96.7	149.9	179.1	206.1	260.1	306.6	350.0	390.5
97.5°	16.5	16.5	28.5	68.2	119.2	143.2	168.6	221.1	264.6	305.8	341.0
100°	13.5	14.2	16.5	44.2	86.2	109.4	134.9	180.6	224.1	263.1	294.6
102.5°	12.0	12.0	12.7	27.0	59.2	80.2	102.7	143.2	186.6	221.1	254.8
105°	9.7	10.5	10.5	14.2	39.7	55.5	74.2	113.2	149.2	183.6	214.4
107.5°	8.2	8.2	8.2	9.0	24.0	36.0	51.0	82.4	116.9	149.9	178.4
110°	6.7	6.7	6.7	7.5	11.2	21.0	33.0	58.5	88.4	119.9	144.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	5.2	6.0	6.0	6.0	6.7	9.7	18.7	42.0	64.5	91.4	114.7
115°	4.5	4.5	4.5	4.5	5.2	5.2	7.5	24.7	46.5	67.5	89.9
117.5°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	12.0	30.7	48.7	67.5
120°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.5	16.5	33.7	48.7
122.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	4.5	18.7	33.0
125°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	6.0	18.7
127.5°	1.5	1.5	1.5	1.5	0.7	0.7	0.7	0.7	0.7	1.5	6.7
130°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.7
132.5°	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	1302.7	1302.7	1302.7	1302.7	1302.7	1302.7	1302.7	1302.7	1302.7	1302.7
2.5°	1292.9	1298.9	1306.4	1309.4	1303.4	1308.7	1308.7	1301.2	1301.9	1287.0
5°	1299.7	1310.9	1321.4	1315.4	1316.2	1315.4	1323.7	1317.7	1315.4	1315.4
7.5°	1317.7	1327.4	1329.7	1336.4	1335.7	1343.2	1336.4	1342.4	1340.2	1334.9
10°	1336.4	1340.9	1346.9	1364.9	1366.4	1363.4	1374.6	1365.7	1366.4	1364.2
12.5°	1345.4	1370.9	1371.6	1389.6	1385.9	1397.1	1398.6	1401.6	1402.4	1394.9
15°	1367.2	1385.1	1399.4	1414.4	1414.4	1423.4	1431.6	1430.9	1431.6	1429.4
17.5°	1381.4	1409.1	1418.9	1431.6	1436.9	1446.6	1451.1	1458.6	1456.3	1452.6
20°	1391.9	1412.9	1434.6	1448.1	1445.9	1457.8	1469.8	1457.8	1466.1	1466.8
22.5°	1388.9	1421.9	1437.6	1454.8	1461.6	1466.1	1475.8	1484.8	1484.8	1481.1
25°	1391.1	1419.6	1443.6	1460.8	1466.1	1476.6	1489.3	1492.3	1496.8	1487.1
27.5°	1387.4	1420.4	1445.9	1464.6	1464.6	1487.1	1492.3	1505.1	1508.8	1502.1
30°	1388.9	1418.1	1442.1	1472.1	1478.8	1490.8	1504.3	1513.3	1511.8	1513.3
32.5°	1378.4	1412.1	1439.9	1472.1	1482.6	1489.3	1505.1	1506.6	1505.1	1508.1
35°	1360.4	1401.6	1443.6	1460.8	1469.8	1483.3	1487.1	1494.6	1507.3	1496.1
37.5°	1349.2	1389.6	1412.1	1439.1	1448.9	1460.1	1468.3	1469.8	1472.1	1471.3
40°	1328.2	1366.4	1386.6	1414.4	1418.1	1436.1	1430.9	1438.4	1445.1	1440.6
42.5°	1305.7	1336.4	1363.4	1382.9	1391.9	1396.4	1410.6	1413.6	1421.9	1416.6
45°	1270.5	1303.4	1332.7	1353.7	1361.2	1376.1	1382.9	1388.1	1396.4	1399.4
47.5°	1242.0	1275.0	1304.9	1335.7	1334.2	1351.4	1364.2	1361.9	1368.7	1371.6
50°	1203.8	1244.2	1281.0	1302.7	1310.2	1326.7	1331.9	1346.9	1353.7	1348.4
52.5°	1173.0	1217.2	1240.5	1276.5	1285.5	1298.9	1313.9	1315.4	1329.7	1327.4
55°	1141.5	1181.3	1218.7	1242.0	1252.5	1269.7	1280.2	1286.2	1292.2	1298.2
57.5°	1101.8	1152.8	1184.3	1213.5	1224.7	1236.0	1251.7	1259.2	1272.0	1276.5
60°	1071.1	1123.6	1149.8	1183.5	1194.8	1207.5	1218.7	1225.5	1235.2	1237.5
62.5°	1038.1	1085.3	1117.6	1149.0	1159.5	1170.0	1182.8	1194.0	1197.8	1192.5
65°	999.9	1047.9	1077.1	1108.6	1116.8	1137.0	1133.3	1144.5	1149.0	1152.0
67.5°	963.9	1017.1	1039.6	1058.3	1077.8	1075.6	1090.6	1089.8	1098.8	1104.8
70°	921.2	963.2	984.1	1011.9	1017.1	1023.9	1035.9	1038.9	1044.1	1047.1
72.5°	877.0	920.4	939.2	958.7	971.4	970.6	978.9	984.9	991.6	992.4
75°	833.5	862.0	885.2	903.9	913.7	915.2	925.7	924.2	939.9	937.7
77.5°	783.3	814.7	829.7	848.5	856.7	865.0	870.2	874.7	877.0	883.0
80°	724.1	761.5	772.8	793.0	799.0	808.0	810.2	820.0	823.7	826.0
82.5°	673.8	698.6	715.8	736.0	749.5	748.0	757.8	763.8	768.3	768.3
85°	617.6	646.1	661.8	679.8	692.6	694.8	704.6	704.6	710.6	713.6
87.5°	559.2	593.6	606.4	625.9	640.1	637.9	644.6	653.6	656.6	661.8
90°	507.4	535.2	556.2	574.9	587.6	589.1	596.6	604.1	605.6	614.6
92.5°	465.5	488.7	511.2	530.7	535.2	541.2	547.9	559.9	562.2	571.1
95°	416.7	445.2	463.2	482.7	490.2	494.7	502.2	511.2	518.7	525.4
97.5°	372.5	398.0	417.5	432.5	443.0	446.0	455.7	461.7	467.0	474.5
100°	325.3	347.8	368.8	386.0	394.3	396.5	407.0	411.5	416.0	422.7
102.5°	281.8	308.8	320.8	339.5	346.3	350.0	357.5	367.3	368.0	370.3
105°	237.6	263.8	281.1	294.6	302.8	305.8	313.3	323.8	324.5	329.8
107.5°	203.1	225.6	242.8	257.1	265.3	268.3	274.3	278.1	283.3	284.8
110°	169.4	189.6	206.9	218.9	225.6	231.6	238.4	244.3	247.3	248.1



TEST NUMBER: P233296

CATALOG NUMBER: 4VRVT3-LD5-6-W-UNV-L840-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	137.2	156.7	171.6	186.6	192.6	197.1	203.9	211.4	215.1	215.1
115°	110.2	128.2	143.9	155.9	164.1	166.4	172.4	178.4	181.4	181.4
117.5°	84.7	103.4	117.7	128.2	134.2	137.2	144.7	150.7	152.9	154.4
120°	64.5	79.5	92.9	104.2	107.9	113.2	118.4	123.7	126.7	126.7
122.5°	47.2	60.7	70.5	80.2	86.9	88.4	95.2	101.2	102.7	104.2
125°	32.2	43.5	53.2	61.5	66.7	68.2	73.5	78.7	80.2	81.7
127.5°	16.5	27.7	36.7	45.0	48.7	51.7	56.2	60.7	62.2	63.0
130°	4.5	12.7	21.7	29.2	32.2	34.5	39.7	42.7	45.7	45.0
132.5°	0.0	2.2	7.5	14.2	16.5	19.5	24.0	27.0	28.5	30.0
135°	0.0	0.0	0.7	3.0	4.5	6.0	9.0	12.7	12.7	12.7
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)